

LESSON  
3.6

## Practice

For use with pages 168–173

Practice  
continued  
For use with pages 168–173LESSON  
3.6

Name the cross products of the proportion.

1.  $\frac{n}{11} = \frac{40}{55}$

2.  $\frac{4}{9} = \frac{1}{x}$

3.  $\frac{1.8}{1.9} = \frac{b}{3.8}$

4.  $\frac{a+6}{21} = \frac{4}{7}$

5.  $\frac{5x}{x+1} = \frac{30}{9}$

6.  $\frac{2.2}{3.3} = \frac{a-2}{a-1}$

Solve the proportion.

7.  $\frac{3}{5} = \frac{21}{m}$

8.  $\frac{12}{7} = \frac{60}{d}$

9.  $\frac{24}{x} = \frac{48}{60}$

10.  $\frac{5}{7} = \frac{3w}{21}$

11.  $\frac{2w}{16} = \frac{30}{80}$

12.  $\frac{2z}{24} = \frac{6}{8}$

13.  $\frac{8}{9} = \frac{30+a}{45}$

14.  $\frac{9-y}{44} = \frac{5}{22}$

15.  $\frac{26}{15} = \frac{104}{70-w}$

16.  $\frac{35}{16} = \frac{c-8}{2}$

17.  $\frac{1}{9} = \frac{a}{a+24}$

18.  $\frac{2}{n} = \frac{14}{n+30}$

LESSON  
3.7**Practice**

For use with pages 176–181

**Use a proportion to answer the question.**

1. What percent of 125 is 25?
2. What percent of 70 is 14?
3. What number is 15% of 80?
4. What number is 65% of 180?

5. 3 is 2% of what number?
6. 384 is 64% of what number?

**Use the percent equation to answer the question.**

7. What percent of 64 is 16?
8. What percent of 160 is 128?
9. What number is 12% of 225?
10. What number is 85% of 360?
11. 4.8 is 8% of what number?
12. 25.8 is 86% of what number?

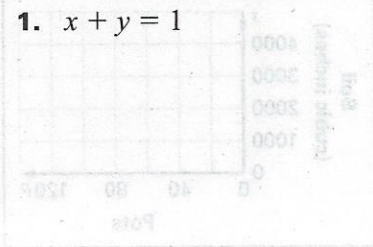
**Find the percent. Round your answer to the nearest whole percent when necessary.**

13. \$6 tip for a \$40 dinner
14. \$8.10 tax on an item priced at \$135
15. 46 musicians out of 230 people
16. 18 action movies out of 45 movies

**LESSON 4.3 Practice**  
For use with pages 225–232

Find the **x-intercept** and the **y-intercept** of the graph of the equation.

1.  $x + y = 1$



2.  $x - y = -5$

3.  $6x - 3y = -3$

4.  $5x + 10y = 30$

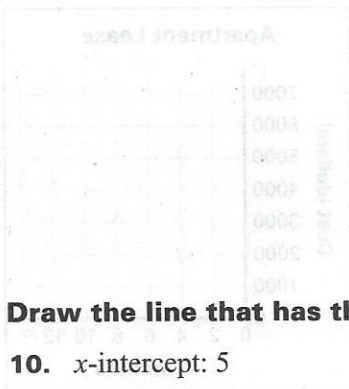
5.  $9y - 5x = 20$

6.  $8x - 2y = 16$

7.  $7x + 8y = 18$

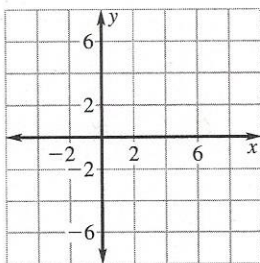
8.  $2y - 12x = -6$

9.  $2x - 0.5y = 8$

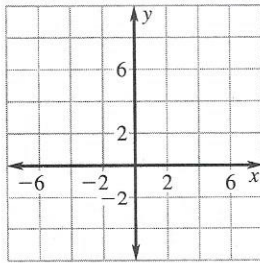


Draw the line that has the given intercepts.

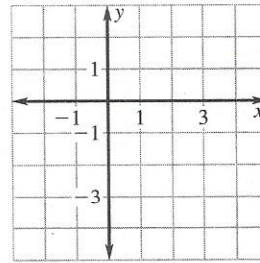
10. x-intercept: 5  
y-intercept: 4



11. x-intercept: -1  
y-intercept: 6



12. x-intercept: 2  
y-intercept: -3



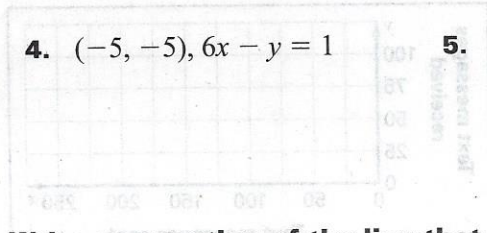
**LESSON**  
**5.5****Practice**

For use with pages 318–324

**Write an equation of the line that passes through the given point and is parallel to the given line.**

1.  $(4, 7), y = 5x - 3$       2.  $(3, -2), y = \frac{2}{3}x + 1$       3.  $(-6, 1), 4x + y = 7$

4.  $(-5, -5), 6x - y = 1$       5.  $(0, -8), 8x + 4y = 5$       6.  $(-9, 11), 5x - 10y = 3$



**Write an equation of the line that passes through the given point and is perpendicular to the given line.**

7.  $(1, -1), y = 3x + 2$       8.  $(5, 0), y = \frac{2}{3}x - 4$       9.  $(3, -7), y = -\frac{1}{5}x + 1$

10.  $(-9, 2), 10x - 5y = 6$       11.  $(10, -11), -2x + 5y = 1$       12.  $(-4, -8), 8x + 3y = 7$

**Determine which of the following lines, if any, are parallel or perpendicular.**

13. Line  $a: y = 8x - 5$ , Line  $b: y = \frac{1}{8}x + 1$ , Line  $c: 8x + y = 2$

14. Line  $a: y = -2x + 5$ , Line  $b: 2y - x = 3$ , Line  $c: 2x + y = 1$

15. Line  $a: 6x + 2y = 5$ , Line  $b: y = \frac{1}{3}x - 4$ , Line  $c: y = -3x + 5$

**LESSON**  
**2.5****Practice**

For use with pages 96–101

**Use the distributive property to write an equivalent expression.**

1.  $5(x + 11)$

2.  $3(x - 12)$

3.  $-4(x + 8)$

4.  $9(2x + 1)$

5.  $(x - 7)(-10)$

6.  $(4x + 3)5$

7.  $x(4x - 1)$

8.  $2x(x - 1)$

9.  $-x(5x + 2)$

**Identify the terms, like terms, coefficients, and constant terms of the expression.**

10.  $-8 + 2x + 5 + 11x$

11.  $4x^2 + 1 - 3x^2 + 5$

12.  $7y^2 - 6 + 3y^2 - 15$

13.  $3xy + 5 - 2xy + 10$

**Simplify the expression.**

14.  $6 + 10x + 3$

15.  $2(3x + 1) + 4x$

16.  $6(5 - x) + 12x$

17.  $7(x - 1) - 5$

18.  $8x + 3(2x - 1)$

19.  $-2(x + 4) - 3$

20.  $11x - (x + 7)$

21.  $9 - 2(x - 4)$

22.  $7x - 3(4 - 2x)$